

## ABSTRACT OF THE DISCLOSURE

An optical scanning system includes a probe and a processor. The probe includes a mechanical oscillator responsive to AC voltage signals and an optical fiber. The optical fiber has a free end that executes an oscillatory scanning motion in response to being mechanically driven by the mechanical oscillator. The processor is configured to receive measured intensities of light emitted from spots of a sample scanned by light from the free end of the optical fiber. The processor is also configured to assign intensities to image pixels based on the measured intensities of light. The acts of assigning compensate for variations in the density of the scanned spots.

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